

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hydrogen peroxide plasma-sterilization method comprising:

providing a plasma-sterilization indicator[[;]] that increases a speed of discoloration of a product, the plasma-sterilization indicator comprising: one or more compounds (A) selected from the group consisting of adsorption indicators and metal chelate-titration indicators; an organic metal compound (B); and a polyvalent alcohol (C)[[;]];

forming a product via a cation in a reaction between the one or more compounds (A) and the organic metal compound (B); and

discoloring the product by hydrogen peroxide plasma-sterilization, wherein the polyvalent alcohol (C) increases a discoloration speed of the discoloring of the product

~~wherein the adsorption indicator is selected from indicators used in detection of metal ions that discolor as adsorbed on colloidal particle, and the metal chelate titration indicator is selected from the group consisting of organic colorants having a proton that can be replaced with a metal ion in the molecule and compounds having multidentate ligands that can form a chelate compound by binding to a metal ion.~~

2. (Currently Amended) The hydrogen peroxide plasma sterilization method indicator according to Claim 1, wherein the one or more compounds (A) selected from the group consisting of adsorption indicators and metal chelate-titration indicators are compounds selected from hematoxylin, Mordant Blue 29, Eriochrome Black T, xylenol orange, and 1-(2-pyridylazo)-2-naphthol (PAN).

3. (Currently Amended) The hydrogen peroxide plasma-sterilization method indicator according to Claim 1, wherein the organic metal compound (B) is one or more compound selected from aluminum chelate compounds, titanium chelate compounds, and zirconium chelate compounds.

4. - 6. (Canceled)

7. (Currently Amended) The hydrogen peroxide plasma-sterilization method indicator according to Claim 1, wherein the polyvalent alcohol (C) comprises at least one glycol selected from the group consisting of ethylene glycol, diethylene glycol, polyethylene glycol, propylene glycol, and dipropylene glycol.

8. - 9. (Canceled)

10. (Currently Amended) A sterilization packaging material capable of containing an article to be sterilized by plasma sterilization treatment according to the hydrogen peroxide plasma-sterilization method of claim 1, wherein at least part thereof of the packaging material is made of a gas permeable paper or nonwoven fabric, and an indicator area of a plasma-sterilization indicator comprising at least one compound (A) selected from the group consisting of adsorption indicators and metal chelate-titration indicators, an organic metal compound (B), and a polyvalent alcohol (C) is formed thereon, wherein a product formed in a reaction between at least one compound (A) and the organic metal compound (B) discolors into a definitely different color in a particular pH range due to a pH change caused by hydrogen peroxide and an oxidative force in plasma treatment, ~~wherein the adsorption indicator is selected from indicators used in detection of metal ions that discolor as adsorbed on colloidal particle, and the metal chelate titration indicator is selected from the group consisting of organic colorants having a proton that can be replaced with a metal ion in the molecule and compounds having multidentate ligands that can form a chelate compound by binding to a metal ion.~~

11. (Original) The sterilization packaging material according to Claim 10, wherein the compound (A) is selected from the group consisting of hematoxylin, Mordant Blue 29, Eriochrome Black T, xylenol orange, and 1-(2-pyridylazo)-2-naphthol (PAN).

12. (Currently Amended) The hydrogen peroxide plasma sterilization method indicator according to claim 1, wherein a content of the polyvalent alcohol (C) is in the range of 1.0% to 10.0% by weight.

13. (New) The hydrogen peroxide plasma-sterilization method according to claim 1, wherein the adsorption indicator is selected from indicators used in detection of metal ions that discolor as adsorbed on colloidal particle; and the metal chelate-titration indicator is selected from the group consisting of organic colorants having a proton that can be replaced with a metal ion in the molecule and compounds having multidentate ligands that can form a chelate compound by binding to a metal ion.

14. (New) A plasma-sterilization indicator that increases a speed of discoloration of a product and that is used in a hydrogen peroxide plasma-sterilization method, the plasma-sterilization indicator comprising:

one or more compounds (A) selected from the group consisting of adsorption indicators and metal chelate-titration indicators; an organic metal compound (B); and a polyvalent alcohol (C);

forming a product via a cation in a reaction between the one or more compounds (A) and the organic metal compound (B); and

discoloring the product by hydrogen peroxide plasma-sterilization, wherein the polyvalent alcohol (C) increases a discoloration speed of the discoloring of the product.

15. (New) The plasma-sterilization indicator according to claim 14, wherein the one or more compounds (A) selected from the group consisting of adsorption indicators and metal chelate-titration indicators are compounds selected from hematoxylin, Mordant Blue 29, Eriochrome Black T, xylenol orange, and 1-(2-pyridylazo)-2-naphthol (PAN).

16. (New) The plasma-sterilization indicator according to claim 14, wherein the organic metal compound (B) is one or more compound selected from

aluminum chelate compounds, titanium chelate compounds, and zirconium chelate compounds.

17. (New) The plasma-sterilization indicator according to claim 14, wherein the polyvalent alcohol (C) comprises at least one glycol selected from the group consisting of ethylene glycol, diethylene glycol, polyethylene glycol, propylene glycol, and dipropylene glycol.

18. (New) The plasma sterilization indicator according to claim 14, wherein a content of the polyvalent alcohol (C) is in the range of 1.0% to 10.0% by weight.

19. (New) The hydrogen peroxide plasma-sterilization indicator according to claim 14, wherein the adsorption indicator is selected from indicators used in detection of metal ions that discolor as adsorbed on colloidal particle; and the metal chelate-titration indicator is selected from the group consisting of organic colorants having a proton that can be replaced with a metal ion in the molecule and compounds having multidentate ligands that can form a chelate compound by binding to a metal ion.